

ABSTRACT OF THE DISCLOSURE

A process and apparatus collects pigment nanoparticles by forming a vapor of a pigment that is solid at room temperature, the vapor of the pigment being provided in an inert gaseous carrying medium. At least some of the pigment is solidified within the gaseous stream. The gaseous stream and pigment material is moved in a gaseous carrying environment into or through a dry mechanical pumping system. While the particles are within the dry mechanical pumping system or after the nanoparticles have moved through the dry pumping system, the pigment material and nanoparticles are contacted with an inert liquid collecting medium.